

CLARO SCIENTIFIC, LLC

SPECTRAWAVE™ AND SISTERS™

Performance Advantages Make SpectraWave and SISTERS a Clear Choice for Malaria/Anemia Point of Care Diagnostics

A Commitment to Improving the Health and Well Being of Mothers and Children Globally

Claro Scientific has developed SpectraWave™, a point of care (POC) medical diagnostic system requiring a drop of blood to conduct a comprehensive patient analysis. In 2010, PATH (Program for Appropriate Technology in Health) completed a stakeholder analysis funded by the United States Agency for International Development (USAID) defining the unmet need for timely, accurate diagnosis of malaria, anemia and the causes of anemia. These are major public health problems that affect the well being of children and mothers. Based upon results from Claro's research and clinical development programs, PATH selected Claro's SpectraWave system for the development of a combined malaria and anemia rapid diagnostic test (M/aRDT) for the developing world. In June and July 2011, PATH and Claro will complete market and form factor studies in Africa. These results will support the final design of a portable system and M/aRDT application to maximize functionality and usability in bringing quality care to the patient wherever they are located.

PROVEN TECHNOLOGY

SpectraWave's ability to accurately measure key blood parameters and to identify and quantify malaria infection has been demonstrated in a combination of laboratory and clinical trials. The core technology has been field tested in a malaria endemic area in South America. Results from this successful effort were further advanced through collaborations with the University of South Florida College of Public Health/Wilbur Milhous, PhD and Florida Blood Services. This combined work demonstrates that SpectraWave can deliver the actionable information needed to improve patient outcomes and save lives.



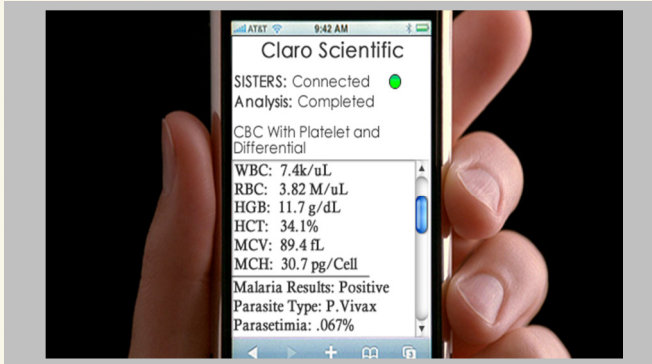
SpectraWave Prototype Developed for Market and Form Factor Studies in Africa in 2011

Based on these successful research and clinical development efforts, patient data reports will initially include:

- Hemoglobin, Hematocrit, Mean Corpuscular Volume, Mean Corpuscular Hemoglobin Concentration, Red Blood Cell count
- Sensitivity of malaria detection below the current standard of 200 parasites per microliter of blood
- Identification of malaria species and life-cycle stage
- Quantification of malaria infection level

The data report will be continuously expanded to provide additional information from the same sample. Claro, PATH and USF are focusing on application development/clinical studies to monitor white blood cell counts, analyze hemoglobin subtypes and identify bacterial and viral causes of infections.

ONE PLATFORM – MULTIPLE APPLICATIONS



A Revolutionary Optical Profiling Technology to detect and monitor deadly diseases at a fraction of the time and cost required today

Claro applied its patented photonics-based technology to develop SpectraWave as an innovative diagnostic product platform system. The system optimizes the capture of how light interacts with a sample. The result is an optical profile, a highly quantitative data file used for sample identification, characterization and quantification. The optical profile is interpreted and stored in SISTERS™, Claro's application software and database system. Proprietary models and algorithms in SISTERS analyze the optical profile to characterize the sample, including the size, shape, chemical composition and internal structure of cells and particles.

Application specific product lines developed from this platform will deliver an unprecedented level of information about the character of blood, blood culture, urine, saliva or tissue samples. Claro's reagentless analysis provides these test results in less than five minutes, a fraction of the time needed for other systems. SpectraWave can also be used to characterize the stage of disease development and to assess treatment response. Other advantages include its portability, ease of use and lower costs to purchase and operate. In summary, SpectraWave will improve laboratory performance and bring critical testing from the central laboratory to the patient.

PERFORMANCE ADVANTAGES MAKE SPECTRAWAVE AND SISTERS A CLEAR CHOICE FOR POC DIAGNOSTICS

Claro's systems are ideally suited for point of care and rapid diagnostic test applications in remote and underdeveloped locations. This assessment is based upon several important advantages over other marketed diagnostic systems, or new systems under development:

- Single sample analysis replaces several tests
- Comprehensive results available within five minutes
- Fully automated; Does not require skilled lab technician
- Reagentless
- Low cost to operate
- Portable; Analysis brought to the patient
- Scalable for using same technology in laboratories
- Durable components, minimal maintenance
- New tests can be added through remote updates
- Optical profiles can be stored in SISTERS for long-term patient monitoring, epidemiological analysis and rapid development of new tests

In summary, Claro's M/aRDT test will improve upon the performance required for POC anemia and malaria diagnosis today. This easy-to-use robust test measures all key blood parameters standard to a Complete Blood Count test in the developed world. The same test also identifies and quantifies the malaria parasite causing an infection. By providing quantitative information, not just a yes/no result, healthcare workers will be able to make better informed decisions about the best course of treatment for every patient.